HOW STUDENTS OBTAIN COLLEGE KNOWLEDGE DURING THEIR TRANSITION FROM HIGH SCHOOL TO COLLEGE

by

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DEDICATION

This is dedicated to my husband Jeff, my love and inspiration.

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I would like to thank my family and friends who have supported me throughout my program. Thank you to my thesis committee, Drs. Arminio, Rose, and Long who provided invaluable help and feedback during this entire process. Finally, to my husband, Jeff, my love, partner-in-crime, and best friend - thank you for always encouraging and inspiring me each and every day. I cannot wait to see what adventures are in store for us next.

TABLE OF CONTENTS

A batra at	Page
Abstract	
Introduction	
Problem Statement and Research Focus	
Significance of Research	
Literature Review	8
Nancy Schlossberg's Transition Theory	8
Defining College Readiness	9
The Importance of College Knowledge to Students' Transition to College	13
Factors that Facilitate Students' Transition from High School to College	16
Support systems.	16
K-12 and higher education collaboration.	19
Methodology	24
Findings	33
Sharing College Knowledge Through the High School to College Pipeline: on One End, Culture at the Other End	
Sources of College Knowledge: A "Team Approach"	37
"Transition as a Continuum"	41
Collaboration: Misperceptions and Missing Links	42
-	
-	
on One End, Culture at the Other End	

Revisiting Conley's Model of College Readiness	51
Implications	54
Delimitations and Limitations	59
Future Research	61
Appendix A Components of College Readiness (adapted from Conley, 2010)	63
Appendix B Informed Consent Form for Interviewees	64
Appendix C Interview Questions	66
Appendix D Student Survey	67
Appendix E Email Sent to Students with Online Survey	72
Appendix F Coding Tree	73
References	74

ABSTRACT

HOW STUDENTS OBTAIN COLLEGE KNOWLEDGE DURING THEIR

TRANSITION FROM HIGH SCHOOL TO COLLEGE

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George Mason University, 2014

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This thesis describes a case study conducted at selected northern Virginia high schools

and at George Mason University (Mason). Through interviews with high school

counselors and Mason transition program staff, student surveys, and observations at

University events, the student researcher examined the college knowledge that students

acquire during their transition from high school to college, where students obtain this

type of knowledge, and how high schools and higher education institutions help students

gain this knowledge. The findings from this study demonstrated that there are missing

links and gaps in students' preparation and transition experiences. This thesis offers

recommendations on how educators both at high schools and higher education

institutions can improve the preparation of students for their transition from high school

to college.

INTRODUCTION

Problem Statement and Research Focus

Postsecondary education continues to be an aspiration of today's students, with a majority still entering higher education through the high school to college pipeline.

According to the National Center for Education Statistics (2013), in 2011, the "immediate college enrollment rate," which is "the annual percentage of high school completers (including GED recipients) of a given year who enroll in two- or four-year colleges in the fall immediately after completing high school," (p. 132) was sixty-eight percent. In today's economy, a college degree has become more of a necessity for employment, upward mobility, and higher earnings. Carnevale, Smith, and Strohl (2010) reported that in 2008, fifty-nine percent of jobs in the United States' economy required postsecondary education. The authors projected that this percentage will increase to sixty-three percent by 2018. Because of the continuing and growing importance of higher education, students need to be prepared for their transition from high school to college.

Academic preparation is consistently identified in the research as a key factor and indicator for success in college (Adelman, 2006; Conley, 2005; Goldrick-Rab, Carter, & Wagner, 2007; Roderick, Nagaoka, & Coca, 2009; Wyatt, Wiley, Camara, & Proestler, 2012). According to the College Board (2014), over the last ten years, an increasing number of high school students "have experienced college-level rigor" (p.10) through

advanced placement classes and exams. Despite an increase in exposure to a rigorous high school curriculum, a significant number of students are not continuing on to their second-year or are not completing their degree. Data from ACT (2013) reported that the national first-to-second-year retention rates for four-year public and private institutions were about sixty-four percent and sixty-seven percent, respectively. In terms of degree attainment, data from a report by the National Center for Education Statistics (2013) showed, "in 2012, some thirty-three percent of twenty-five to twenty-nine year olds had completed a bachelor's degree or higher credential" (p. 8). The question of why some students are not completing college even though more institutions are preparing them academically for higher education continues to be investigated. Particularly, research on what is missing from the conventional preparation of students for their transition to college can provide some insight.

The commonly defined characteristics of whether or not a student is prepared for college, or a student's college readiness, is not enough to ensure that students successfully transition to higher education (Hooker & Brand, 2010; Roderick, et al., 2009). A comprehensive model of what skills and knowledge a "college-ready" student possesses is required. Hooker and Brand (2010) stressed the need for a more complete model of college readiness:

The traditional vision of college readiness, which has typically meant an exclusive focus on improved academic performance for in-school youth, may fail to fully capture the developmental process required for all young people to complete high

school and enter, succeed in, and graduate from postsecondary education and training (p. 76).

Conley (2010) developed a model that encompassed both the academic and nonacademic knowledge and skills a college-ready student should have to succeed in higher education. His model identified four dimensions of college readiness: (a) key cognitive strategies, which are the foundations of well-developed critical thinking skills; (b) key content knowledge, which is the academic knowledge a student must understand and have the ability to learn; (c) academic behaviors, which are "a range of behaviors that reflects greater student self-awareness, self-monitoring, and self-control of a series of processes and behaviors necessary for academic success" (Conley, 2010, p. 39); and (d) contextual and awareness skills, or college knowledge, which according to Conley (2010) is "a systemic understanding of the postsecondary educational system, combined with specific knowledge of the norms, values, and conventions of interactions in the college context and the human relations skills necessary to cope within this system" (p. 40). He argued, "in practice, these facets are not mutually exclusive or perfectly nested. They interact with one another extensively" (Conley, 2010, p. 31). Conley emphasized the importance of including all four dimensions when preparing students for college and in assessing whether or not students are college-ready.

The postsecondary educational system is complex and often difficult to navigate, especially for students who are not informed and prepared for the transition from high school to college. Conley (2010) argued that "going to college is like entering a new culture," (p. 20) and to be fully prepared for success in this new culture, students have to

"possess knowledge of how the postsecondary system operates and the differences between high school and college" (p. 20). This knowledge and understanding of college norms and culture along with information on the application, financial aid, and enrollment processes encompass the college knowledge dimension of Conley's model. College knowledge helps students decide on an institution that aligns well with their needs, apply to and enroll at an institution, and successfully transition and adjust to the college environment.

Conley (2010) argued that high schools play a vital role in preparing students for life after high school, and his research has focused on designing high school programs that have a college-going culture and develop the knowledge and skills he identified in his model for college readiness. Additionally, Conley (2010) recommended that high schools partner with local colleges and universities as a strategy to "build student college knowledge" (p. 88). He stated,

the effect of partnerships is to improve alignment between secondary and postsecondary levels and to help educators at each level discover the ways in which they can change programs so that more students acquire the college knowledge necessary to be ready to make the transition from one system to the other (Conley, 2010, p. 88).

Vargas (2004) also emphasized the importance of high schools, and more specifically, the significance of prepared and accessible guidance counselors. Counselors are "a ready source" of "college preparatory knowledge," but because of "time dedicated to college counseling, student-to-counselor ratios, and the frequency of student-to-counselor contact

about college," (Vargas, 2004, p. 11) students may not be receiving the information they need for their transition. Another source of college knowledge identified in the research is college preparation programs not managed by either high schools or higher education institutions. According to Burleson, Hallett, and Park (2008), these types of programs "are designed to increase individuals' base of knowledge about college and access to higher education" (p. 15). Additionally, the issue of timing was discussed in their research. The researchers found that college preparation programs were not in session "during the most critical months – those immediately preceding entry and transition to college" (Burleson, et al., 2008, p. 15).

To expand the research on student transition, this study aimed to identify and examine the college knowledge that traditional-aged (18-24 years old) undergraduate students acquire during their transition from high school to college. How high schools and higher education institutions have helped students gain this knowledge was examined as well. Questions addressed were: (a) What college knowledge did current college students obtain during their transition from high school to college? (b) Where did this knowledge come from? and (c) How does the collaboration or disconnect of high schools and higher education institutions influence students' ability to gain college knowledge? The setting for this study was northern Virginia, specifically at George Mason University and selected high schools.

Significance of Research

Preparation for college is an essential component of a student's transition and how a student prepares for higher education influences his or her success in higher education

(Goldrick-Rab, et al., 2007; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Smith & Wertlieb, 2005; Smith & Zhang, 2009). In addition to academic knowledge, sharing college knowledge with students would thoroughly prepare them for their transition and adjustment to an unfamiliar environment. Since academic preparation has been a focus of past research on college readiness, college knowledge was at the center of this study. By taking a deeper look at the contextual knowledge that students need for a successful transition, the findings from this study will help researchers and practitioners identify what missing links there may be in the preparation and transition processes.

For this study, college knowledge was defined as an understanding of the admissions, financial aid, and enrollment processes, the culture of college, and how colleges operate (Conley, 2010). It is important to conduct research on college knowledge because this type of knowledge helps students successfully decide on the institution that aligns well with their needs and navigate a complex environment once they are on campus. Additionally, with a comprehensive understanding of college knowledge, educators involved in preparing students for higher education will be better informed and equipped with the appropriate information students need for a successful transition. Past research has discussed and demonstrated the importance of college knowledge to college readiness and student transition. This study examined more thoroughly the components of college knowledge and how it is shared with students. Through a case study, this research explored the types of college knowledge students obtained, what they found helpful, and where they acquired this knowledge. Because both secondary and postsecondary institutions are involved in the preparation and transition of students, this research also

examined if and how these institutions have worked together to help students gain college knowledge.

LITERATURE REVIEW

A student's transition from high school to college is a complex process that involves more than just the student. Educators must have a comprehensive understanding of what factors, people, knowledge, strategies, and resources are needed for students to have a successful transition to higher education. The first section in this chapter discusses Schlossberg's (2011) transition theory, which provides a broad understanding of the transition process and can be applied to a student in transition from secondary to postsecondary education. The next section presents in more detail Conley's (2010) model of college readiness. Then, the importance of college knowledge to students' transition to higher education is discussed. The final section examines what resources have helped students adjust to college.

Nancy Schlossberg's Transition Theory

Schlossberg's (2011) Transition Theory was the theoretical perspective that framed this study. This theory explains the "factors related to the transition, the individual, and the environment that are likely to determine the degree of impact a given transition will have at a particular time" (Evans, Forney, Guido, Patton, & Renn, 2010, pp. 212-213). The theory examines all aspects of a transition: (a) type; (b) its components; (c) the transition process; and (d) the factors that influence the transition. Schlossberg (2011) identified three types of transitions: (a) anticipated; (b) unanticipated;

and (c) nonevent. An anticipated transition is one that is expected, while an unanticipated transition is one that is unexpected and often disruptive. A nonevent transition is expected but does not occur. The transition from high school to college is typically an anticipated transition unless a student fails to attend at the start of the semester.

Schlossberg's (2011) theory identified four "Ss" that affect how an individual experiences a transition. These four "Ss" are (a) situation; (b) self; (c) supports; and (d) strategies. Situation refers to the circumstances of the transition. When examining the situation of a transition, triggers, timing, duration, perception, and degree of control, previous experience, and context are considered (Schlossberg, 2011; Evans, et al., 2010). Self includes personal and demographic characteristics of the individual and psychological resources the individual utilizes during a transition (Evans, et al., 2010). Supports are the resources, people, and assistance an individual receives during their time of transition. Strategies are the tactics that individuals use to cope with a transition period.

Defining College Readiness

Academics, policy makers, students, and other stakeholders have had difficulty defining and identifying the characteristics of a college-ready student because of the complexity of the issue. Researchers have traditionally measured college readiness by a student's academic performance and scores on standardized tests (Adelman, 2006; Roderick, et al., 2009; Sedlacek, 2011). Specifically, high school grade point averages high school curriculum, and standardized test scores have been considered predictors of college readiness and success in college-level courses because these measures identified

the content knowledge a student has studied, the level of difficulty a student has encountered, and whether or not a student has mastered the material presented to them. There are limitations in using academic performance to measure college readiness. For example, content and standards are not consistent among high schools (Porter & Polikoff, 2012). The performance levels and skills of an "A" student at one high school may differ from the performance levels and skills of an "A" student at another high school. Additionally, course titles may be similar at different high schools, but the content material may not be the same. These inconsistencies make it difficult to differentiate between a well-prepared and under-prepared student, especially in regards to academics.

Because of the limitations of academic performance as a measure, researchers have used non-cognitive or nonacademic variables to indicate college readiness. Sedlacek (2011) argued that traditional measures provide a narrow picture of college readiness, and do not take into consideration the changing student population and their experiences in education. Non-cognitive or nonacademic knowledge and skills, such as student work ethic, personality, self-concept, and college knowledge, offer alternative measures that are not captured by academic benchmarks (Porter & Polikoff, 2012; Sedlacek, 2011; Sommerfeld, 2011). These factors aid students in navigating and handling the various demands of the college environment. Although examining non-cognitive variables to measure college readiness is a step in the right direction, researchers cannot forgo the significance of students' academic knowledge because students require a foundation of knowledge for their college courses.

Conley (2010) developed a model that addresses both the academic and nonacademic knowledge and skills a college-ready student should have to succeed in higher education. His model identifies four dimensions that need to be examined and measured when assessing whether or not a student is college-ready: (a) key cognitive strategies; (b) key content knowledge; (c) academic behaviors; and (d) contextual and awareness skills, also known as college knowledge (Conley, 2010). Examples of key cognitive strategies include the ability to problem-solve, research, discuss, debate and interpret. College-ready students use these strategies to apply their learning. Examples of key content knowledge are building vocabulary, word analysis skills, reading comprehension, understanding the basic concepts, principles, and techniques of algebra, scientific thinking, evaluating evidence and competing claims, communication skills, and creativity (Conley, 2008). Time management, stress management, and task prioritizing are academic behaviors that a college-ready student exhibits. These behaviors are needed for success in their college courses and adjustment to the college environment. College knowledge is the social and cultural knowledge that students must obtain in order to successfully apply to, enroll in, and navigate the complex system and culture of higher education.

Conley (2010) emphasized that these dimensions interact with each other and that all four must be considered when preparing students for college. College knowledge and academic behaviors typically encompass broad knowledge and skills, while key cognitive strategies and key content knowledge are more focused on students' academic knowledge and skills. However, each dimension affects the others. Conley (2010) asserted that "a

lack of college knowledge often affects the decisions students make regarding the specific content knowledge they choose to study and master" (pp. 31-32). A visual representation of how each of the dimensions in Conley's model are related and connected to each other is presented in Appendix A. This visual representation is an adaptation of Conley's visual model of the facets of college readiness. Both images reflect the intersection of the components of college readiness identified in Conley's model, but each image used a different shape to portray this aspect of the model. Conley used embedded circles while the adaptation for this study used puzzle pieces. The use of puzzle pieces emphasizes the interconnectedness of the four dimensions. If one piece or dimension is removed or not examined, the picture of college readiness is not complete.

Conley's (2010) model of college readiness was the conceptual framework for this study. It guided the exploration of the knowledge and skills that students need to gain to successfully transition from high school to college. Conley's model was used because it examines college readiness in a holistic way. It takes a comprehensive look at both the academic and non-academic aspects of college readiness, while other researchers have had a narrower view of college readiness. In addition, Conley emphasized the connections among the dimensions he identified, which is lacking from other models.

Although Conley (2010) offered a more thorough examination of college readiness than other researchers, he made assumptions that might limit the use of his model. The model assumes that resources are accessible and equitable for all students; however, there is a disparity in educational opportunities, which affects the college preparation that students receive (Kirst & Venezia, 2004). A limitation of Conley's model

is that it does not address who is involved in preparing students for college, which would speak to the inequitable opportunities that exist. Conley's model also assumes that cultural, environmental, and background differences have no affect on the knowledge and skills that students need to be college-ready, which may not be the case. Students' backgrounds and the types of institutions they attend might affect the knowledge that they find helpful for their transition to college.

The Importance of College Knowledge to Students' Transition to College

As discussed, for this study, college knowledge was defined as an understanding of the admissions, financial aid, and enrollment processes, the culture of college, what is expected of students in college, and how colleges operate (Conley, 2010). College knowledge is composed of social and cultural capital. To have a complete understanding of college knowledge, social capital and cultural capital need to be defined. Cultural capital is knowledge of how the educational system operates and of the norms, behaviors, and values of its institutions, thus the culture of education (Bourdieu, 1986; Louie, 2007). Social capital is access to and engagement with relationships and connections that are resources for success in a system (Bourdieu, 1986; Coleman, 1988; Louie, 2007). In education, examples of social capital are relationships with high school teachers and college faculty, involvement in student organizations and other social groups, and family and community networks.

Traditionally, college knowledge has not been seen as a measure of college readiness; however, Roderick, et al. (2009) argued that "if educators are to use college readiness as a strategy for accomplishing the goal of college access and success, they

must couple academic preparedness with the knowledge and skills students need to navigate the college-going process" (p. 200). College knowledge is essential to students' preparation and transition because it informs students' decisions on the postsecondary opportunities that will align best with their needs. Hooker and Brand (2010) stressed that "college knowledge, and the development of a college-going identity, can enhance the relevance of the high school experience, help youth stay engaged in school, and ensure they take the necessary steps to prepare for and enroll in postsecondary education" (p. 77), which are all necessary for a successful transition. By acquiring and understanding college knowledge, students can begin to make connections between their high school experiences and success in higher education, and be more intentional about their preparation for and transition to college. With college knowledge, students transitioning to college are better prepared to make informed choices, navigate the complex system of higher education, and understand and engage in a new culture, especially if they obtain and process this information early in the process.

Conley (2010) argued, "going to college is like entering a new culture" (p. 20). There are expectations, norms, traditions, and behaviors that students have to learn to successfully adjust to the college environment. Examples include knowing how to access resources when needed, engaging with professors, interacting with students with differing perspectives, beliefs, and cultures, and collaborating and working in a team.

Understanding the differences between the high school environment that students are leaving and the college environment that they are entering is part of the cultural capital that students need to obtain. High school is a more structured environment where teachers

usually keep students on track by providing clearly prescribed directions and reminding students that assignments are due (Conley, 2008). In college, students are expected to be more independent and to take initiative and responsibility for their work (Conley, 2008).

According to Conley (2010), college knowledge "can make the difference between persisting and withdrawing when students face challenges during their first year of college" (p. 72). An example of how college knowledge can influence students' adjustment to and success in college is presented in Burleson, et al.'s (2008) research. Burleson, et al. examined how the possession or lack of possession of college knowledge can influence students' experiences in college. Participants of their study graduated from "low-performing schools in a large urban area" (Burleson, et al., 2008, p. 12) and attended a summer bridge program at a university. A majority of students were from lowincome families and were either Latino or African-American. The researchers asked students to complete a survey prior to the start of the program. They also conducted observations during the summer bridge program. Student-faculty relationships, which is a critical component of college culture, was a theme that emerged in Burleson et al.'s findings. Students believed that "their relationships with professors would be formal and distant" (Burleson, et al., 2008, p. 14). Meetings with professors would only be needed if students were struggling academically. Burleson, et al. (2008) argued that this perception of the student-faculty relationship could negatively affect students' "integration into the campus community and reduces the chance that students will seek academic support" (p. 14).

College knowledge is often privileged, implicit, and unstated information because it is not widely accessible. It is typically shared and passed on to students from people who are familiar with and have experienced college. There are some students who face an information barrier so they may not be able to easily access and learn about this shared knowledge (Vargas, 2004). Since college knowledge is essential for a successful transition to college, these students are at a higher risk of being under-prepared, not adjusting well to college, and possibly, not graduating (Burleson, et al., 2008; Hooker & Brand, 2010). Without college knowledge, students' expectations of their experiences both inside and outside the classroom may not align with the realities of higher education. This misalignment and lack of knowledge can cause "many students [to] become alienated, frustrated, and even humiliated during the freshman year and decide that college is not the place for them" (Conley, 2010, p. 40).

Factors that Facilitate Students' Transition from High School to College

A significant amount of research has been conducted on the importance of high-quality and rigorous academic preparation to student transition and success in higher education (Conley, 2005; Goldrick-Rab, et al., 2007; Roderick, et al., 2009; Wyatt, et al., 2012). As explained in Conley's (2010) model and in past research, other factors have also been identified as essential for a successful transition from high school to college. This section examines the effects of support systems and K-12 and higher education collaboration on students' transition to postsecondary education.

Support systems. Schlossberg's (2011) Transition Theory identifies support as

one of the factors that influences how an individual experiences a transition. Parents, peers, high school teachers, guidance counselors, college professors, and academic advisors are often identified as members of a positive support network during a student's transition to college (Clark, 2005; Smith & Zhang, 2009; Yazedjian, Purswell, Sevin, & Toews, 2007). The participation of members of a support system during a student's transition to college can range from passive, which primarily involves information sharing, to intensive, when students identify a member of a support network as a role model. Support systems help students develop an attachment to the institution and a sense of belonging, which aid in the adjustment to a new environment and culture (Yazedjian, et al., 2007). Additionally, these social networks are often involved in making students aware of the opportunities after high school, demonstrating to students that college is a possibility for them, and discussing the importance of attending college. According to Engle, Bermeo, and O'Brien (2006), "engaging students with role models showed them that it was possible to succeed and demonstrated the potential for improving their lives and the lives of others in their families and communities by getting a college degree" (p. 6).

Research has reinforced the importance of support systems to student success in higher education. Yazedjian, et al. (2007) conducted an online survey and focus groups with students at a four-year public university in central Texas to explore students' perceptions of how support from parents, peers, and institutions facilitated their adjustment to the campus environment during their first year of college. Overall, parents provided emotional and financial support, while student peers provided social and

academic support. Participants who were first-generation students also discussed how parents did not always "understand the complexity of college life" (Yazedjian, et al., 2007, p. 35) and they could not seek advice from them because of their lack of college experience. In addition to support from family and peers, participants in Yazedijian, et al.'s study reported that supportive relationships with faculty and administrators, a supportive campus environment, and accessible and helpful institutional resources positively impacted their adjustment to college. A critique of this study is that participants were only second-year students who were academically successful in college, which was measured by their grade point average. Yazedjian, et al. used the university's definition of academic success, which was a grade point average of 2.0 or higher. An assumption is made that students who are not academically successful in their secondyear have not adjusted to college. Inclusion of other student populations in the study can provide further insight on the role and significance of support systems on students' adjustment to college. The researchers could have explored whether or not a lack of adjustment is a result of a weak or non-existent support system.

Through focus groups, Farmer-Hinton (2008) explored the impact of "school-based social capital" (p. 132) on the transition to college for students of color, particularly for those that are first-generation college students. Farmer-Hinton (2008) defined "school-based social capital" (p. 132) as a network of teachers, counselors, and staff members that are dedicated to working and sharing knowledge on college planning with students. Participants were high school seniors from a college preparatory school. Ninety-four percent of the students at the school were African American, almost sixty percent of

the students lived below the poverty line, and twelve percent of the students' parents graduated from college. Farmer-Hinton found that the participants' social networks at the school strengthened their commitment to attending college and guided students during the college search and choice process. Importantly, the school-based support system provided resources and information that students' families were not able to share because they did not graduate from college. A critique of this study is that Famer-Hinton only researched a school that already had a strong college-going culture and college preparatory mission. Inclusion of other types of institutions can provide a broader understanding of the role of school networks for the targeted student population, especially at schools where these networks may not be as accessible or where college planning is a secondary goal because of time and workload.

K-12 and higher education collaboration. One strategy that has been found to help students prepare for their transition from high school to college is collaboration between K-12 and higher education systems. There has been a call for policies and programs that span both systems but these collaborations are still not the norm. It is often argued that K-12 and higher education operate as separate and disjointed systems rather than as one collaborative education system (Boswell, 2000; Domina & Ruzek, 2012; Kirst & Venezia, 2004). According to Venezia, Kirst, and Antonio (2003), this lack of connection exists because K-12 schooling and higher education were created as two separate systems, and have remained so ever since.

Students are negatively impacted by the disconnect between K-12 and higher education because there is a lack of communication and information flow between the

two systems (Kirst & Venezia, 2004). Students, their families, and educators receive "conflicting and vague messages about what they need to know and be able to do to enter and succeed in college" (Venezia & Kirst, 2005, p. 284). Students are not receiving clear signals and consistent information on how they should prepare for college and what is expected of them once they step on campus. As a result, they may have incorrect information and unrealistic expectations as they prepare for and transition to higher education.

In their research for Stanford University's Bridge Project, Venezia, et al. (2003) found that "many students, their parents, and educators were very confused or misinformed about how students should prepare for college" (p. 42). Students had either vague understandings or were misinformed about admissions and placement policies. Kirst and Venezia (2004) described examples of misconceptions that students had about higher education. In high school and during the college admissions process, students take a plethora of exams, including high school exams, course exams, the SAT and/or ACT, and college placement exams. Additionally, high school graduation standards and requirements often do not align with college entrance or placement requirements (Kirst & Venezia, 2004). This variance in both assessments and curricula can cause confusion for students because it is not clear what academic information and skills students need to possess in order to graduate from high school and successfully transition to college. Students and their families also often overestimate the cost of college or are unaware of the financial aid process (Kirst & Venezia, 2004). As a result, they believe that they cannot afford to attend college. Through collaboration, K-12 and higher education

systems can better inform students about what is needed for a successful transition and what will be expected of them when they are in college. The institutions can work together to align requirements and standards, and to ensure that they are sharing accurate and complete information with students and their families.

The Bridge Project "demonstrated that in order to increase opportunities for all students to prepare for, attend, and graduate from postsecondary institutions, reform initiatives at various levels within the entire K-16 education system should be better integrated or created in tandem" (Kirst & Venezia, 2004, p. 3). Collaborative relationships can help students develop, enhance, and share their college knowledge (Conley, 2010; Kirst & Venezia, 2004). An example of this type of relationship between a high school and higher education institution is a dual enrollment program, where high school students enroll in college-level courses and earn credit for it, usually both high school and college credit. In dual enrollment programs, students are exposed to college-level work and the college environment while in high school so they have a clearer understanding of what to expect when they step on campus.

Domina and Ruzek (2012) examined the effectiveness of collaborative relationships between universities and school districts in California. To measure effectiveness, the researchers analyzed on-time graduation rates, completion of courses that were admission requirements for the California State University (CSU) or the University of California (UC) system, and enrollment trends of high school graduates at CSU, UC, and the California Community Colleges (Domina & Ruzek, 2012). Domina and Ruzek analyzed data from fifteen relationships, all of which were involved in student

services and teacher professional development. Ten of the fifteen collaborations were considered comprehensive because of their additional involvement in policy-making and planning. Overall, they found that these relationships increased high school graduation and college enrollment rates, but it took time to see these effects. As emphasized by Domina and Ruzek (2012), "it takes time to cultivate interactions, build trust, and formulate collaborative efforts...K-16 partnerships should not be considered quick and easy fixes" (p. 261).

As discussed, K-12 and higher education collaboration has a positive impact on student transition from high school to college. K-12 and higher education educators have to communicate and work with each other to ensure that students are receiving clear and consistent messages and information on the knowledge and skills they need to prepare for and succeed in college. There can no longer be the "assumption that the responsibility of K-12 teachers ends with college admissions rather than college success, while the responsibility of higher education begins with the admission process rather than any significant involvement in the preparation of students up to that point" (Boswell, 2000, pp. 5-6). Both institutions are involved in students' preparation for, transition to, and success in higher education.

The literature describes what factors influence the transition process and the importance of college knowledge to students' transition and adjustment to college. However, a more in-depth examination of college knowledge is needed to gain a comprehensive understanding of the significance of this type of knowledge to students' transition from high school to college. As mentioned, this study aimed to identify the

college knowledge that traditional-aged undergraduate students acquire during their transition and explored the sources of this knowledge. The next section describes the methodology used to attain this research objective.

METHODOLOGY

Schlossberg's (2011) Transition Theory provided the theoretical lens for this study. This theory provides a broad understanding of the transition process and can be applied to a student in transition from high school to college. For this study, Schlossberg's (2011) four "Ss" provided a framework on how to understand students' transition from high school to college and what knowledge they need for a successful transition. With regard to the research questions, examining students' support systems and the situation factors of the transition helped identify the college knowledge that students found helpful during their transition, where students acquired college knowledge, and who aided them during their transition.

Setting

The setting and research focus of this study was the examination of the college knowledge of traditional-aged (18-24 years old) undergraduate students in northern Virginia. Research questions that were addressed were (a) What college knowledge did current college students obtain during their transition from high school to college?

(b) Where did this knowledge come from? and (c) How does the collaboration or disconnect of high schools and higher education institutions influence students' ability to gain college knowledge? To answer the research questions, a case study was conducted at George Mason University and select northern Virginia high schools. This area was

chosen for this study because a majority of Mason students are from the northern Virginia area. According to the George Mason University Factbook (2012-13), 66.4 percent of the student population is from northern Virginia.

Two northern Virginia high schools participated in this study. One school is a feeder school of Mason and the other school works with a program at the University. Mason defines a feeder school by the number of students attending the University from that particular high school (H. Granger, personal communication, January 13, 2014). Organizational and demographic information for each high school is described below.

- High School 1 is a school in suburban northern Virginia. In the 2012-2013 school year, there were 2,575 students and 156 teachers. The breakdown of the student population by race and ethnicity was as follows: (a) 43 percent Hispanic of any race; (b) 0.3 percent American Indian/Alaskan; (c) 9.2 percent Asian; (d) 26.5 percent Black/African American; (e) 0.2 percent Hawaiian/Pacific Islander; (f) 14.7 percent White; and (g) 6.1 percent Multi-racial. The school has an 84.6 percent four-year on-time graduation rate and approximately 80.5 percent of the student population enrolls in higher education. The high school offers over 50 clubs and organizations for its students and faculty.
- High School 2 is a school in suburban northern Virginia. In the 2012-2013 school year, there were 2,990 students and 190 teachers. The breakdown of the student population by race and ethnicity was as follows: (a) 13 percent Hispanic of any race; (b) 0.1 percent American Indian/Alaskan; (c) 10.6 percent Asian; (d) 9.8 percent are Black/African American; (e) 59.3 percent White; and (f) 7.2 percent

Multi-racial. The school has a 96.4 percent four-year on-time graduation rate and approximately 95 percent of the student population enrolls in higher education.

The high school offers over a variety of programs and extracurricular activities for its students and teachers.

Data Collection

The "case study evidence" (Yin, 2014) was collected through interviews with counselors at high schools, interviews with transition program staff at George Mason University, surveys of first-year and second-year undergraduate students at Mason, and observations at events hosted by the University. Multiple sources of evidence provided a variety of perspectives on the research questions for this study. All evidence collected and analyzed were stored in a password-protected location on the student researcher's computer. Evidence will be destroyed three years after completion of the study.

Interviews. To identify which high schools to solicit for interviews, the student researcher requested from the Office of Student Financial Aid at Mason a list of feeder schools. Staff members from the Early Identification Program and K-12 Partnerships program at Mason were also consulted on which schools they have working relationships with through their programs. To determine which programs at Mason to contact for this study, online research was conducted on the major transition programs the University offers to their students. After the programs were identified, senior staff members of each program were contacted for interviews.

Three staff members from transition programs at Mason and four counselors from two high schools in northern Virginia were interviewed about the role each institution plays in preparing for and helping students with their transition from high school to college. Each interviewee signed an informed consent form (see Appendix B). At each high school, two counselors participated in the study. Semi-structured interviews were either conducted face-to-face or over the phone and lasted approximately thirty minutes each. Each interviewee was interviewed once, and no follow-up interviews were conducted. All of the interviews were recorded.

Interviewees were asked to discuss what college knowledge they think students need to obtain during their transition to college and where they are acquiring this type of knowledge (see Appendix C for interview questions). Descriptions of participants interviewed for this study are provided below. Pseudonyms are assigned to protect participants' confidentiality.

- Sam is a guidance counselor at a suburban high school. As a counselor, he
 works with students on defining and accomplishing their academic, social, and
 career goals.
- Melissa is a counselor at a suburban high school. She works with students on their college and career goals. Melissa assists students on how to identify colleges that would be the best fit for them, complete the application process, locate scholarships, and find job opportunities. Although she works with students on both their college and career goals, Melissa argues that a majority of her job is focused on college planning.
- Tim is a school counselor at a suburban high school. As a counselor, he works with students on their social, emotional, and academic needs. He is also

- responsible for scheduling courses, assisting students on identifying their goals for life after high school, and post-high school planning.
- Lisa is a school counselor at a suburban high school. Her primary
 responsibilities include social, emotional, and academic counseling,
 scheduling courses, assisting students on identifying their goals for life after
 high school, and post-high school planning.
- Kimberly is an employee in the orientation office at Mason. She is involved in
 planning academic and co-curricular components of the orientation experience
 for all undergraduate students, both first-year and transfer, at the University.

 During orientation, there are activities, presentations, and workshops on
 academic success, financial aid, student organizations on campus, and
 resources Mason provides for students.
- Courtney is an employee in Mason's Transition Resource Center. In her role, she works on the curriculum for the credit-bearing transition courses offered to all students through the University Transitions Program. The University Transitions Program includes a transition course for first-year students.
- Laura works in the Office of Admissions at Mason. She is responsible for recruitment, counseling, and application review for both first-year and transfer students. Laura is also involved in on-campus events, communications, and marketing for the Office of Admissions.

Online survey. An online survey hosted on Google Forms was emailed to three hundred first-year and two hundred and fifty second-year undergraduate students at

Mason (see Appendix D for a copy of the student survey and Appendix E for a copy of the email message sent to the students). Student email addresses were obtained through the Facebook groups for George Mason University's Classes of 2016 and 2017 and through Mason's People Finder. Only responses from students over the age of eighteen, from the northern Virginia area, and who immediately transitioned from high school to college were used for this research. Responses from eleven students were used for this study. Demographic information on the respondents are provided below.

- Seven were first-year students and four were second-year students.
- Seven students identified as females, three students identified as males, and one student did not identify their gender.
- Six students identified as White or Caucasian, one student identified as Hispanic,
 one student identified as Indian, one student identified as multiracial, one student
 identified as other, and one student did not identify his or her ethnic background.
 In the survey, students reflected on their transition from high school to college. Students

were asked to discuss what college knowledge they obtained and found useful during their transition, what college preparation and transition activities they found helpful in their adjustment to the campus environment, and who was supportive and aided in their transition process.

Observations. In addition to the interviews and surveys, "observational evidence" (Yin, 2014) was collected at a financial aid workshop and freshman information session at George Mason University. At both events, participation was as a "passive observer" (Yin, 2014); therefore, there was no direct involvement in these

events. Observations focused on what college knowledge Mason shares with prospective college students. The Office of Student Financial Aid at Mason hosted a two-hour financial aid workshop on two different days, a weekday evening and a weekend afternoon, for prospective students and their families. The student researcher attended the weekend afternoon workshop. There were about thirty attendees, and mostly parents were in the audience. Few students attended the event. Staff presented on (a) financial aid in general; (b) the FAFSA application; (c) scholarships; and (d) appeals. The Office of Admissions at Mason runs almost daily (sessions are not held on Sundays) freshman information sessions for both prospective and admitted students and their families. Sessions last about an hour and are followed by a campus tour. During these sessions, an Admissions representative discusses the following topics: (a) campus location and proximity to Washington, DC; (b) history of the University; (c) academics; (d) approach to education and the Mason IDEA, which are the University's core institutional characteristics and stands for innovative, diverse, entrepreneurial, and accessible (George Mason University, 2014); (e) internship opportunities; (f) balance between academics and student life; (g) application process if the student has not applied yet; and (h) next steps if the student has already submitted their application. The information session attended was held on a weekday morning. At the session attended, there was a parent and accepted student participating in the event.

Data Analysis

Analysis of the evidence consisted of transcribing interviews, coding responses and notes from the interviews, surveys, and event observations, and identifying "patterns"

(Yin, 2014). The student researcher prepared the transcriptions. To develop the trustworthiness of evidence from the interviews, member checks were conducted. Interviewees were asked to review the transcriptions and notes for incorrect information and additions. The web-based software Dedoose was used as an aid to organize and code the units of analysis, which were excerpts and phrases that described the types of knowledge shared, where knowledge was obtained, explanations of the transition process and its components, and details on specific programs that assist students in their transition from high school to college. In Dedoose, the student researcher uploaded the transcriptions, student survey responses, and observational evidence. Once uploaded, the student researcher read through the evidence and applied codes to the units of analysis. In addition to Dedoose, the researcher reread the transcriptions, survey responses, and notes from the events attended and made margin notes to code the evidence. The codes were concepts that were used to organize the units of analysis. The identification of codes was based on the research questions and Conley's (2010) definition of college knowledge. For this study, college knowledge was defined as an understanding of the admissions, financial aid, and enrollment processes, the culture of college, and how colleges operate (Conley, 2010). Examples of codes were (a) college knowledge, which had sub-codes of financial aid, college culture, admissions, and none; (b) defining transition; (c) collaboration, with sub-codes of collaboration within University and high schoolhigher education collaboration; (d) timing; and (e) where students obtain knowledge, with sub-codes of higher education, family, high school, community, peers, and student. The coding tree, which was generated in Dedoose, is presented in Appendix F.

Once coding was completed, patterns were identified by analyzing the frequency and prevalence of codes and corresponding excerpts and phrases. The patterns that emerged were: (a) sharing college knowledge through the educational pipeline; (b) where students obtain college knowledge; (c) a gap in knowledge; (d) "transition as a continuum;" and (e) collaboration. These patterns were recurring ones that interviewees, students, and presenters discussed in regards to students' transition to college.

FINDINGS

The research questions for this study were (a) What college knowledge did current college students obtain during their transition from high school to college?

(b) Where did this knowledge come from? and (c) How does the collaboration or disconnect of high schools and higher education institutions influence students' ability to gain college knowledge? As discussed, evidence was collected through interviews with counselors at selected northern Virginia high schools, transition program staff at George Mason University, surveys of first-year and second-year Mason students, and observations at two events at Mason. This chapter presents the connections that emerged from the various sources: (a) sharing college knowledge through the educational pipeline; (b) where students obtain college knowledge; (c) a gap in knowledge; (d) "transition as a continuum;" and (e) collaboration. This chapter also explores how these patterns affected students' experiences during their transition to college.

Sharing College Knowledge Through the High School to College Pipeline: "Frontend" on One End, Culture at the Other End

There were differences between the types of college knowledge that counselors at northern Virginia high schools and transition program staff at George Mason University shared with students and their families. Counselors at both high schools indicated that the college knowledge they primarily discuss with students is about the admissions process.

Lisa, a high school counselor, explained that the "focus at the high school level is definitely heavy on the front-end – the admissions process, rather than maybe the enrollment process and the culture of college." Sam, a high school guidance counselor, described a financial aid night that they hold where "parents can work on their financial aid packages with someone that can help them." Both high schools rely on returning alumni to share knowledge on culture and life at college with students. Melissa, a college and career counselor, explained,

culture is important. I don't know that we [high schools] stress on that as much. We do [The high school does] hold alumni panels where alumni come in and students have the opportunity to ask them questions. The questions that we [high schools] hear are more about what it's like to live in the dorms, what the food is like, etc.

Focusing on the "front-end" of the transition process helps students get into and pay for college; however, it does not prepare them for their adjustment to an environment that may be unfamiliar to them.

George Mason University program staff discussed various aspects of college knowledge with enrolled students. Both prospective and enrolled students cited receiving knowledge on college culture from Mason program staff and events. Mason hosts events on the admissions and financial aid processes for prospective students and their families. At a financial aid workshop, staff from the Office of Student Financial Aid presented on the different types of financial aid, walked through the FAFSA application, provided tips and advice, and answered questions, both general and specific to individual cases. A

presenter acknowledged, "financial aid is complicated, but does not have to be if one

(a) keeps it as simple as possible; and (b) reads." To help simplify the financial aid

process, a staff member walked through a handout titled "Financial Aid A-Z," which

brought the topics and language closer to home for students and their families.

Representatives from the Office of Admissions were also available at the end of the event

if attendees wanted to learn more about applying to George Mason University. A parent

and accepted student participated in the Office of Admissions' information session the

student researcher attended. Because the prospective student was already accepted to the

University, the session was focused on the programs offered and campus life. The

admissions representative answered questions throughout the session. Most of the

questions came from the parent, and were about academics, career counseling for

students, safety on campus, deadlines, and financial aid.

Once enrolled at Mason, there are programs, such as orientation and the University Transitions Program, which aid students with their transition and adjustment to college. Staff members of these programs primarily share information on college life and culture, the differences between high school and college, and strategies on how to adjust to a new environment. Kimberly, an employee in Mason's orientation office, discussed the learning outcomes that orientation has for students. Kimberly explained that during orientation, which is required for all incoming undergraduate students, staff members work with students on (a) how to "navigate systems," which are the nuts-and-bolts students need to survive on campus; (b) how to "build connections with their peers, with student leaders, with faculty and staff, with program (academic college, student

government, etc.);" and (c) "understanding expectations with college education." These learning outcomes align with the skills and knowledge that Conley (2010) identified in his definition of college knowledge.

One of the courses offered through the University Transitions Program is specifically for first-year students. Through course policies, assignments, and course topics, instructors introduce first-year students to the expectations of a college course. Instructors and this course are also sources of college knowledge, especially on college culture and how the University operates. According to Courtney, who works on the University Transitions Program, the goals for this course are to (a) "provide guidance and support for freshman students transitioning from high school to college;" (b) "promote student success through academic skill-building, educational planning, and career preparation;" and (c) "challenge new students to engage in college life and the Mason community, while fostering well-being, safety, and self-sufficiency." The course goals address the necessary skills and knowledge students need for a successful transition. Additionally, the class guides and supports the students during their first-year as well as points them to resources that can provide additional support and help if needed. As described by Schlossberg (2011), these supports affect how a person experiences a transition. For example, according to the course syllabus written by Courtney, the course requires students to meet with their academic advisor and plan for future semesters because it is a "crucial part of your [their] college experience." For another assignment, students have to attend three Mason community events outside of the classroom and write a reflection paper on each event. This assignment introduces students to life and culture on campus.

Sources of College Knowledge: A "Team Approach"

College knowledge was shared through a variety of sources at both of the high schools that were a part of this research and at George Mason University. Sam described preparing for and working with students on their transition to life after high school as a "team approach." Students obtain knowledge from the school, their own research online, their parents, and from their teachers. According to Sam, "teachers spend a lot of time, more days with students than their parents and guidance counselors. Exposure in the classroom and making sure it's a team approach. Making sure that everyone encourages postsecondary planning."

When asked about where students acquire college knowledge, all three Mason staff members identified programs at the University. Students obtain knowledge through admissions, orientation, and the University Transitions Program. Courtney specifically talked about the first-year transition course where they "parade resources, services, organizations, people (faculty and staff) in so that they can get acclimated." All interviewees found these courses to be beneficial for students' transition to college because as described by Kimberly, "these courses build a great base and focus on the elements you [the student researcher] talked about in the college knowledge piece." At the University, college knowledge was also disseminated through events hosted by the Office of Student Financial Aid and the Office of Admissions for students and their families.

On the surveys, students indicated that they received college knowledge from various sources. Students found that programs and activities, such as advanced placement classes at their high schools, orientation, campus tours, and involvement in student organizations, helped them most in their preparation for and adjustment to college. During orientation, students became familiar with the campus, met new people, and learned about clubs and activities at Mason. Involvement with student organizations helped students bond with others. One student described, "rushing a fraternity helped me join an organization and really create a base socially and mentally." Students also discussed how high school teachers aided in their transition because they provided advice and information on the application process.

Students recognized their families as a valuable source of support and knowledge in their transition to college. When asked about who was supportive of their college preparation activities and who aided in their transition and adjustment to college, a majority of the students (nine out of eleven respondents) identified their families, specifically parents and siblings. Families were supportive and helpful by attending open houses and tours with students, encouraging students, providing moral support and advice, sharing their experiences, and helping with move-in. One student stated, "my [his] parents helped me [him] with move-in and are giving me [him] moral support. My [His] twin brother is my roommate and is always there to help with whatever problems I [he] may run into." Another student described that his "parents helped with move in and [that] I [he] could call them whenever I [he] needed them." Interestingly, when interviewed about where they believe students are receiving college knowledge, high

school counselors and Mason program staff either misperceived or did not acknowledge the importance of students' families. According to Lisa, students "don't listen to their parents."

The Internet and social media were also highlighted as sources of college knowledge in the evidence. Laura, an employee in the Office of Admissions, explained that "social media has really changed the whole access to college knowledge...Most students will, between mobile devices and Google, most will Google whatever they want." Students mentioned that their own research helped them prepare for college, which points to the increased accessibility to knowledge as more institutions utilize technology to spread the word.

Central to understanding where students obtain the knowledge they need for a successful transition to college is determining whose role it is to prepare students for this transition. A difference between the high schools that participated in this study is that one school has a counselor focused on students' college and career goals, while at the other school, there is not a counselor dedicated to working with students on these types of goals. These differences in staff roles affect where students gain knowledge and where staff members dedicate their time and resources. The counselors at each high school had different opinions on where students obtain college knowledge. At the school without a dedicated counselor for college and career planning, Lisa said that students acquire college knowledge from the Internet and their peers. She stated, "as much as we say it and as many times as we say it, they don't listen to us. They don't listen to their parents."

At the other school, both counselors indicated that students receive knowledge from the

programs they hold at the high school. Melissa believes that they "probably do more than other schools because of her position."

A Gap in Knowledge: Nuts-and-Bolts Instead of Identity Development

Students were asked on the survey to identify the college knowledge that they gained when they prepared for college and the college knowledge they found helpful during their transition. When they prepared for college, students received more of the nuts-and-bolts knowledge on admissions, financial aid, and the differences between high school and college. For example, one student discussed how he or she "learned how to apply to colleges, how to fill out paper work for financial aid, and how the choices in college were different than in high school." When asked about the college knowledge that students found helpful, the responses did not align with their responses on the knowledge that they acquired. Instead of the nuts-and-bolts information, students found that knowledge on how to approach and learn in a college class and knowledge that helped students reflect on who they are and their development were most helpful during their transition. One student "found that the most helpful knowledge I [he] had was knowing who I [he] was, my [his] limits, and what I [he] was willing to do." Another student described how writing her applications helped her transition to college because that task "really got me [her] thinking, what is my [her] passion and how do I [does she] want to go about pursuing it." The application process gave the student the opportunity to reflect on her interests, develop goals based on those interests, and determine how to pursue those goals. The student was able to create a pathway that assisted her in navigating a complex system and unfamiliar environment.

"Transition as a Continuum"

Both high school counselors and Mason program staff discussed timing in terms of students' transition from high school to college. Particularly, interviewees offered when counselors should begin working with students on their preparation for and transition to postsecondary education and when a student's transition process starts. High school counselors and transition program staff agreed that early college awareness and starting the conversations with students early were imperative. Sam explained,

it's critical that high schools take an active role in not only addressing academic needs, but we [high schools] actually engage students in conversation. That we [high schools] don't wait until the last minute. That we [high school counselors and students] have conversations early.

Laura described how her office "hosts everything from kindergarteners and first graders all the way up to seniors coming to visit." A part of the role of her office is to "make sure that students have the possibility that college is an option. It starts and needs to start at a younger age."

Transition begins before students arrive on campus. Both Kimberly and Courtney described "transition as a continuum." Specifically, Kimberly emphasized that transition "starts when a student begins to think about going to college." Courtney also made a similar point arguing that transition begins with Admissions as "the launching point for students to know about college," then orientation, and the "logical next step is that we [the program] hope [hopes] that as many students as possible take UNIV 100, the transitional course for freshman." Counselors at both high schools emphasized the

importance of postsecondary planning as a part of their roles in preparing students for their life after high school. At one school, Tim conferred that

helping them [students] become aware of their options after high school and helping them plan for those options. Then, assisting with the process of college admissions or if it's going to be a technical school or military, helping them set things up and get things moving.

As demonstrated by the evidence, the transition period starts when students begin thinking about and planning for college.

Collaboration: Misperceptions and Missing Links

For this study, the researcher did not provide interviewees with a definition for "collaboration;" therefore, participants' perceptions and own meaning of the concept guided their responses.

"Admissions owns those relationships." When asked about their collaboration with higher education institutions, counselors at both high schools stated that they do not work with area colleges and universities on a regular basis. Institutions visit the high schools to discuss the admissions process and to talk about their programs, but the transition process is not typically a part of these presentations. Tim explained "if you're talking about the actual transition, they are obviously talking to our students about knowledge, selling their colleges and programs, what the kids need to do, but they don't really get into the transition." During her interview, Melissa expressed interest in more collaboration with colleges and universities. However, staff members at Mason thought differently when asked about their collaboration with local high schools. Two of the three

interviewees admitted that their programs do not formally work with local high schools, but as described by Kimberly, "Admissions owns those relationships." When asked if she collaborates with area high schools on preparing students for their transition to college, Laura, who works in the Office of Admissions, responded "absolutely." In her interview, she described how they collaborate with high schools through Mason's K-12 outreach program, outreach events, and high school visits. All interviewees thought these types of relationships would be beneficial for students; however, the disconnect over whether or not these collaborations exist can impact whether or not students gain the knowledge and skills necessary for a successful transition.

The evidence revealed that area high schools primarily connect with George Mason University through the Office of Admissions. This is also the accepted structure at Mason as evidenced by the statement "Admissions owns those relationships." Although collaboration between high schools and higher education institutions are complex and having one point of connection simplifies these relationships, this arrangement can negatively impact how students obtain the knowledge and skills they need for a successful transition to college. In high school, they are only interacting with one area of the University. The Office of Admissions may not be fully informed on what students need to acclimate to the college environment, and as a result, students are not receiving all of the knowledge they need to prepare for their transition. In addition, students' experiences may be disjointed as they move through the transition process. As described by Laura, there is "kind of a hand-off process. Once the students [pay their] deposit, they're part of Orientation and work with their academic departments." Students can lose

the initial connections they made with the University during this "hand-off process." In high school, they work with and connect with the Office of Admissions, but then when they step on to campus, students tend to have little contact with this office. However, if more offices were involved in collaborating with high schools, students would be exposed to and engaged with programs at the University at an earlier stage of their transition process, which would assist in their acclimation to the college environment.

"A broken chain:" Filling in the missing links. Collaboration within George Mason University was also examined in the evidence. There was discussion over which offices at the University play a role in the transition process and who should be involved in creating and supporting first-year experiences for students. Two of the program staff members were interested in more collaboration among transition programs at the University. Kimberly said that Mason lacks a

comprehensive first-year experience program. We have [Mason has] bits and pieces of it...All of these things are run from different offices and there's not a weaving together of that experience so that students see the connections and understand why they're in a step-by-step process to make a successful transition to a student...We try [Mason tries] to continue to put links in the chain because we have [Mason has] a broken chain right now lying along the path toward completing your [a student's] first-year at college.

Laura argued that there should be more integration of experiences that students have with Admissions and orientation. A more integrated first-year program would allow students to make stronger connections between their experiences in college. By filling in the

missing links, institutions can help students gain a better understanding of who they are as college students, adjust to an unfamiliar environment, and ultimately, succeed in higher education.

Collaboration between high schools and colleges and universities can also fill in gaps of information that students may have during their preparation for and transition to college. Interviewees were asked about what they think students gain from collaborative relationships between high schools and postsecondary institutions. Laura explained that "I think [she thinks] there's a trust. I think [She thinks] for folks that don't know anything about college or college admissions, it seems mystical...it's about having honest conversations... it has to be a combination of counseling, of being honest, what colleges are looking for, what the process is like, what the expectations are like." Melissa argued that collaborating with higher education institutions allows students "to hear from someone else. I [She] can answer a lot of general questions, but some of them they need to hear right from the college. Just college experts in general." Through collaborative relationships, institutions can work together to ensure that students gain all of the knowledge they need for a successful transition to college.

The next chapter discusses why these patterns emerged in the evidence and how it affects students' transition experiences. Additionally, the following chapter discusses how the findings connect and relate to Schlossberg's (2011) Transition Theory, the theoretical perspective for this study, and Conley's (2010) model of college readiness, the conceptual framework for this study.

DISCUSSION

This chapter (a) makes meaning of the gaps in knowledge that students received during their transition from high school to college; (b) discusses how collaboration can connect students' experiences during their transition to college; (c) explores the roles of families and the student voice in students' preparation for and transition to college; and (d) revisits Conley's (2010) model of college readiness. Additionally, this chapter connects the findings to Schlossberg's (2011) Transition Theory. In this study, Schlossberg's (2011) factors of self, support, and situation were evident in the participants' views on and experiences with the transition process.

Understanding the Gaps in Knowledge

A disconnect between the college knowledge students received and what they found helpful emerged in the evidence. This misalignment was especially evident in the responses to the online student survey. Students were primarily receiving the nuts-and-bolts of admissions and financial aid during their preparation for college. However, what they found most beneficial for their transition was information on how to approach and learn in a college class and knowledge that prompted them to reflect on their development. The nuts-and-bolts information simplified and made the admissions and financial aid processes more accessible for students and their families; however, students could not use this type of information to navigate the campus and higher education

system, identify and utilize the resources available to them, and engage in college culture and life. Reflections on their development and interests were beneficial to the transition process because students became more aware of their aspirations and needs.

Students' emphasis on their development relates to Schlossberg's (2011) factor of "self" and its influence on how an individual experiences a transition. As defined, self includes personal and demographic characteristics of the individual and psychological resources the individual utilizes during a transition (Evans, et al., 2010). Examples of psychological resources are "ego development, outlook, in particular optimism and self-efficacy; commitment and values; and spirituality and resiliency" (Evans, et al., 2010, p. 217). Providing students with opportunities to develop these resources and their sense of self will influence how they "cope" (Schlossberg, 2011) with and navigate through their transition. With a more developed sense of self, students will be able to develop a pathway for their time in college as well as have a better idea of the resources and support that will best fit and meet their needs.

Connecting the Links Through Collaboration

The findings revealed that preparation at the high school level focuses on the "front-end" of the college transition process, while transition programs at higher education institutions primarily emphasize the knowledge, resources, and skills needed for students' adjustment to college culture. Staff members at high schools concentrate on preparing students for admittance into college, (e.g., admissions and financial aid) while transition programs at higher education institutions place more of their efforts in ensuring that students adjust well to college life and are aware of the resources that are available to

them. The transition process is more fluid than how it is presented to students. Student success is the primary goal and both high schools and higher education institutions play a role in students achieving this goal. The connections need to be made so that students' experiences during their transition, which starts when students begin to think about college, are woven together.

Misperceptions in collaboration within the educational pipeline emerged in the findings. These misperceptions negatively influence how students obtain college knowledge. Minimal or a lack of collaboration both between secondary and postsecondary institutions and between transition programs within a higher education institution can lead to incomplete information being shared with students. If more collaboration existed, high schools and postsecondary institutions could work together on developing and planning events and workshops that encompass the knowledge that each institution believes is necessary to share with their students. Students would receive a more comprehensive foundation of knowledge and skills that they can use during their transition process. Additionally, without intentional collaboration on student transition, students are left on their own to make connections between and meaning of the knowledge they are receiving and the experiences they are having. Without the help of high schools and higher education institutions in this meaning-making process, it is difficult to know whether or not students are obtaining the knowledge and having the experiences that they want and that institutions believe are necessary for a successful transition and ultimately student success.

Schlossberg's (2011) "situation" factor can be applied to the issue of high school and higher education collaboration. Whether or not students obtain the college knowledge they need can depend on the goals of the high school, the resources at the institution they attend, and the availability and structure of preparation and transition programs and activities. Weak or little collaboration can affect students' transition experiences because they might not be provided the chance to participate in comprehensive and engaging opportunities.

The Role of Families in Student Transition

This study examined sources of college knowledge for students, and there was a disparity in views of how students obtain college knowledge. High school counselors and transition program staff at Mason either did not mention students' families or downplayed their involvement. On the other hand, in the online survey, a majority of the respondents stated that their families supported and aided them during their transition process. Parents and siblings shared their college experiences with the students, which helped them navigate and adjust to the new environment. Their families were an important source of college knowledge. This gap in understanding can negatively affect students' transition to postsecondary education because families may not always be informed or up-to-date on college knowledge. Since educational institutions tend to be the gatekeepers of this information, high schools and higher education institutions have to not only share college knowledge with students, but also with their families.

are fully prepared and knowledgeable about what students need for a successful transition.

The role and support of families in students' transition is an example of Schlossberg's (2011) factor of "support." Evans, et al. (2010) described that support systems provide "affect, affirmation, aid, and honest feedback" (p. 217) during an individual's transition period. This study found that these functions were helpful to students during their transition and adjustment to college. However, Schlossberg's (2011) theory does not fully explain how support systems can vary in the roles and functions they play in an individual's time of transition. In this study, the guidance and support of students' families might have been more influential than the support of guidance counselors, teachers, or staff at a higher education institution because of the intimacy of the relationships that students have with their families. The role of families in students' transition process might explain why students found the experiences that their families shared with them to be a valuable source of information. Students are able to relate to and learn from their families' stories. Unlike the nuts-and-bolts information that educators primarily share, the knowledge that parents and siblings pass on to students is more personal.

Using the Student Voice to Fill in the Gaps

As described, the evidence revealed major gaps in students' experiences during their transition from high school to college. Inclusion of the student voice in the development of college preparation and transition activities can help fill these gaps. High schools and higher education institutions should ask students directly about what college

knowledge they need. Educators can also ask alumni to share what they wish they would have known during their preparation for and transition to college. If students were asked about college knowledge and were involved in the planning of preparation and transition activities, institutions would be better informed about what kinds of knowledge students find most helpful and where they seek out knowledge. There would be little uncertainty on whether or not students find the information that is being shared with them to be useful or applicable to their transition process because students themselves expressed the need for that information.

Schlossberg's (1989) work on "marginality and mattering" (p. 5) were not explicitly addressed in her Transition Theory; however, she argued that individuals in transition often feel that they do not belong, are "marginal," and that they do not "matter." By including the student voice in the planning of preparation and transition activities, institutions are acknowledging the needs of their students and are creating environments where students belong. The inclusion of the student voice also demonstrates to students that they "matter," are appreciated, and are being noticed. This work with students can lead to more meaningful transition experiences. If an individual believes that he or she "matters," he or she will be more engaged in the transition process and as a result, will more likely transition successfully into his or her new role (Schlossberg, 1989).

Revisiting Conley's Model of College Readiness

Conley's (2010) model of college readiness was the conceptual framework for this study, and his conceptualization of college knowledge was the definition used to explore students' transition from high school to college. The findings from the interviews and the event observations validated that admissions, financial aid, and college culture are essential aspects of college knowledge that high schools and higher education institutions share with students. However, Conley's model is still not a complete picture of college readiness and is missing pieces that were identified in this research as vital components of the transition process. A more comprehensive model will assist in bridging the gaps revealed in this study and help improve the preparation of students for their transition to college because it will provide a better framework upon which educators can base their programs.

Support systems and knowledge about student development are two areas that are not a part of Conley's (2010) model, but were identified in the evidence as essential factors of a successful transition to college. The resources and people who students rely on and seek information from during their transition to college is a critical component of college readiness. These support systems work with students on the knowledge and skills they need to be prepared and college-ready. In regards to student development, prompting students to reflect on their aspirations will provide them with the opportunity to learn about themselves and pinpoint their passions and interests. If students enter higher education with a more developed sense of who they are, they may be better prepared to navigate an unfamiliar and complex environment.

The findings from this study can inform how educators prepare students for their transition to college. The next chapter provides recommendations for both the

participants of this study and for the education profession as a whole. Limitations of this study and suggestions for future research will also be discussed.

IMPLICATIONS

The findings from this study identified what college knowledge is being transmitted and who is sharing college knowledge with students. The recommendations described in this chapter require both high schools and higher education institutions to be intentional about preparing and working with students on their transition from high school to college. Both institutions need to utilize more proactive rather than reactive strategies.

Sharing College Knowledge

The evidence showed where there are gaps in the communication of college knowledge to students and their families. A recommendation for both the participants of this study and for education practitioners in general is to utilize a more comprehensive strategy in communicating college knowledge. Instead of high schools focusing on one aspect of college knowledge and colleges and universities concentrating on another facet of college knowledge, these institutions should collaborate with each other and discuss with students the transition process and the knowledge needed more holistically. Specifically, staff at high schools should incorporate college culture into their college preparation and transition activities. High school counselors should not only rely on alumni to share information on college life. In addition to "front-end" knowledge, information on the differences between high school and college environments, how to

approach college-level classes, and what resources, such as advising, are available to them once they arrive on campus should be shared with students. High schools should collaborate with neighboring colleges and universities on ensuring that the information they are sharing is accurate and complete. Consequently, students will begin to receive information and prepare for all parts of their transition starting in high school instead of waiting until college to learn about college culture and how it operates.

High school counselors and teachers should also work with students on developing their goals and aspirations. In the evidence, students identified this type of knowledge as helpful during their transition to college. By asking students to reflect on who they are and discover their passions and interests, counselors and teachers will aid in students' acclimation to the college environment because students will have a better idea of what they need for their success. Educators can provide students with this opportunity by creating assignments that ask students what they want to accomplish in college and to develop a pathway and plan of action.

Observations at events at George Mason University exposed the student researcher to how knowledge and information are shared with students and their families. When attending these events, the question of how information is being communicated emerged. The event held by the Office of Student Financial Aid was advertised as a workshop, but was actually a presentation with time for questions and answers at the end. Besides the question and answer period, the participants did not have any interaction with the presenters. A recommendation for higher education professionals is to hold workshops where participants interact with the material instead of sitting and listening to

a lecture. An active workshop, where participants can learn about the particulars of financial aid and work on their FAFSA application, would make this event and financial aid more personal and relatable for participants. Additionally, the workshop the student researcher attended was only for prospective students and their families. Financial aid is an issue that enrolled students and their families have to deal with as well. An additional recommendation for the Office of Student Financial Aid at Mason is to hold workshops for current students and their families. There is an overview session at orientation, but more detailed workshops are needed so that students and their families can remain informed of their financial aid while they are enrolled at the University. Topics that should be discussed are how to maintain their financial aid, keep track of their awards and the terms, and how to repay their loans.

The Internet emerged as a significant source of college knowledge for students. High schools and higher education institutions should develop strategies to utilize technology and social media to share college knowledge. For example, college visits and information sessions are ways through which students obtain knowledge, but not all students are able to physically attend these events. Higher education institutions can connect with a larger number of students virtually through webinars, virtual campus tours, or online toolkits where students can easily access information. In addition to using social media to share information with students, institutions should utilize this technology to engage students in conversation. Another suggestion is to research how students are using social media. Based on that research, high schools and colleges and universities can develop or revise their social media strategies and stay updated on new social media

platforms that students are utilizing. Increasing their presence on the Internet and finding new ways to reach out to students and their families will make college knowledge more accessible.

The findings from this study can also inform what knowledge should be shared with students at each stage of the transition process. Specifically, educators should define what information is relevant and appropriate for students to know during each of their years in high school, during the summer before their first semester of college, and during their first semester in college. The consideration of timing during the preparation for and transition to college would help ensure that students are receiving knowledge that they can engage with, relate to, and utilize.

Developing and Improving Collaborative Relationships

With a majority of its students from the northern Virginia area, offices other than the Office of Admissions at Mason should work with area high schools to ensure that students gain a comprehensive understanding of college knowledge and their transition to college. More intentional sharing of college knowledge and work on student transition is needed. For example, when visiting high schools, the Office of Admissions should discuss more than just the admissions process with students. College culture and how the college operates should be a part of their visits. A suggestion for the Office of Admissions is to work with other transition programs at the University on what college knowledge should be shared with prospective students. Admissions representatives can also ask staff members from these transition programs to join them at high school visits, especially at northern Virginia high schools.

Another implication based on the findings from this study is that not only is collaboration between northern Virginia high schools and George Mason University necessary, but collaboration within Mason is essential. A recommendation for the University is for transition programs to collaborate with each other through the integration of first-year experiences where staff members work together to create a comprehensive transition program for all first-year students. Orientation is mandatory for all incoming students. The University Transitions Program is currently optional. Both orientation and the University Transitions Program should be mandatory for all first-year students.

Defining and Involving All Members of the Team

The findings from this study can also inform the training of educators both in high schools and higher education institutions. A "team approach" strategy was highlighted in the findings; however, not all team members may be adequately trained to work with students on their transition to college. Students interact with a variety of people throughout their educational career, including counselors, teachers, staff, and administrators. As they transition from high school to college, all educators, not just those who are directly involved with college preparation and transition activities, must be prepared and well-informed on the transition process. For example, high school counselors and admissions representatives should not be the gatekeepers of information on the admissions process or modifications to college entrance examinations because as shown in the evidence, they may not be students' primary source of information. Instead,

high school counselors and admissions representatives should view their roles as information-sharers.

Educators must include the student voice in their research, planning, and execution of preparation and transition activities. Educators should go right to the source and ask students about their transition to college. Students can provide information on what knowledge and skills they need and found useful, what types of activities were engaging, and who helped them transition and adjust to the college environment.

Educators at both high schools and colleges and universities can utilize this information to develop preparation and transition events and workshops that are shaped by the student voice.

Another implication of this research is the responsibility and role of educators in preparing for and informing students' families of the transition process. The evidence demonstrated the importance of families to students' transition and adjustment to college; therefore, a recommendation for educators is to ensure that students' families are informed about all aspects of transition, including admissions, financial aid, and expectations both for students when they arrive on campus and for families when students leave home. This part of the college preparation process is especially imperative for families who may have little or no experience with higher education.

Delimitations and Limitations

This section will identify delimitations and limitations of this study. Delimitations were restrictions imposed by the student researcher. Because a case study was conducted, a bounded system was defined for the setting. The study was conducted at George Mason

University and selected northern Virginia high schools. A delimitation of this study is that only Conley's (2010) definition of college knowledge was used for this research. The use of a different lens or perspective might have resulted in other aspects of college knowledge emerging in the evidence that are not identified in Conley's model, but were identified as important to students' transition to college. Another delimitation is that only students who successfully transitioned to college and traditional-aged students participated in the study. Research on other student populations might have provided more insight on the types of college knowledge that students need for their transition and adjustment.

There were also external limitations beyond the student researcher's control. A majority of George Mason University's feeder high schools are located in Fairfax

County; however, counselors from these schools were not asked to participate in this study because the school district did not allow the student researcher to contact their school employees for research purposes. Inclusion of Mason's feeder high schools from Fairfax County in this study might have provided more information on how northern

Virginia high schools and Mason collaborate on student transition. Another limitation of this study is that due to University policies, the student researcher was unable to directly obtain all of the emails of first-year and second-year Mason students from northern

Virginia. As a result, the online survey was emailed to a smaller number of students than expected, which limited the number of responses received. If more students completed the online survey, there would be a more comprehensive look at the student perspective of college knowledge and the transition from high school to college.

Future Research

Based on the findings and limitations of this study, recommendations for future research are provided. One of the limitations identified was that only students who successfully transitioned to college participated in the study. Further research can be conducted on students who left higher education, why they did not transition successfully, and the college knowledge that may have helped them with their transition.

Research on how student backgrounds and demographics, such as gender, race, ethnicity, socioeconomic status, and family educational attainment, might influence the kinds of knowledge that is needed for a successful transition. Past research has shown that post-traditional student populations, such as first-generation students, experience college differently than traditional students (Davis, 2010; Engle & Tinto, 2008; Ward, Siegel, & Davenport, 2012). Research on the college knowledge that post-traditional student populations need for their transition and adjustment would inform high schools and colleges and universities on how to connect with and aid these students.

How students are prepared for higher education and the knowledge they receive are also influenced by the backgrounds of the educators preparing and working with them during this transition process. Therefore, future research can also examine how the backgrounds of educators at both high schools and higher education institutions can affect their approach to the preparation of students for their transition to college.

Another topic for future research is to explore students' experiences during the summer before college. Research on the summer before college can provide insight on how educators can keep students engaged during these gap months so that they are fully

prepared for their transition experiences. Questions that can be addressed include:

(a) How are students preparing for college during the summer before their first semester?

and (b) How can high schools and higher education institutions connect and interact with students during this time period?

Since both high schools and higher education institutions are involved in the transition of students, this research examined how these institutions have worked together to enable students to gain the college knowledge they need to successfully adjust to college. Further research can delve deeper into these relationships by investigating what a high school and higher education collaboration should look like, who should be involved, and how these institutions should collaborate with each other. Future research can also focus on how programs not affiliated with an educational institution, such as a community program or a college access program run by a nonprofit organization, build and share college knowledge.

APPENDIX A COMPONENTS OF COLLEGE READINESS (ADAPTED FROM CONLEY, 2010)

College Knowledge (e.g. social and cultural knowledge) Academic Skills (e.g. time management, stress management, task prioritizing)

Critical Thinking Skills (e.g. ability to problem-solve, research, discuss and interpret) Academic Knowledge
(e.g.
reading
comprehension,
algebra, scientific
literacy)

APPENDIX B INFORMED CONSENT FORM FOR INTERVIEWEES

HOW STUDENTS OBTAIN COLLEGE KNOWLEDGE DURING THEIR TRANSITION FROM HIGH SCHOOL TO COLLEGE

INFORMED CONSENT FORM

RESEARCH PROCEDURES

This research is being conducted to identify the college knowledge that students acquire during their transition from high school to college. It will also look at how high schools and higher education institutions have helped students gain this knowledge. Participants will be program staff from George Mason University (GMU), guidance counselors and college transition counselors at high schools that are considered to be feeder schools of GMU or have a working relationship with the University, and first-year and second-year GMU undergraduates from Northern Virginia.

If you agree to participate, you will be asked to participate in a 45-minute to one-hour interview. Interviews will be audiotaped for the data analysis process. Recordings will be saved and password protected on Kathryn Angeles' computer, and at the conclusion of this research, the recordings will be deleted.

RISKS

There are no foreseeable risks for participating in this research. If you are not comfortable with the interview and wish to discontinue participation in the study, you will be free to leave without penalty.

BENEFITS

There are no direct benefits to you as a participant of this research.

CONFIDENTIALITY

The data in this study will be confidential. Kathryn Angeles will be the only person with access your identifiable information. All data will be password protected on Kathryn's computer. In written findings and reports, pseudonyms will be used.

PARTICIPATION

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no

penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party.

CONTACT

This research is being conducted by Kathryn Angeles, Graduate Student in the MAIS Higher Education Department at George Mason University. For questions or to report a research-related problem, you can contact Kathryn at (908) 884-7150 or at kangeles@masonlive.gmu.edu or her thesis committee chair Dr. Jan Arminio, Director of the Higher Education Program at GMU at (703) 993-2064 or at jarminio@gmu.edu. You may contact the George Mason University Office of Research Integrity & Assurance at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

CONSENT

I have read (or someone has read to me) this form and I am aware that I am being asked to participate in a research study. I voluntarily agree to participate in this study.

Name	
Date of Signature	
Version date: December 12	2013

APPENDIX C INTERVIEW QUESTIONS

Questions for counselors at high schools

- 1. Do you believe you play a role in preparing for and helping students with their transition from high school to college? If so, what role is that?
- 2. What do you think is the role of high schools in students' transition to college?
- 3. College knowledge is an understanding of the admissions, financial aid, and enrollment processes, the culture of college, and how colleges operate (Conley, 2010). What college knowledge do you think students need to acquire to successfully transition to college?
- 4. How and from where do students acquire college knowledge?
- 5. When do you start working with students on preparing for college?
- 6. What programs are offered to students to aid in their transition to college?
- 7. Are there transition activities or programs that other schools are doing that you would like to be doing? If yes, please explain.
- 8. Do area colleges and universities collaborate with your high school on preparing students for their transition to college? If so, how?

Questions for program staff at George Mason University

- 1. Do you believe you play a role in preparing for and helping students with their transition from high school to college? If so, what role is that?
- 2. What do you think is the role of higher education institutions in students' transition to college?
- 3. College knowledge is an understanding of the admissions, financial aid, and enrollment processes, the culture of college, and how colleges operate (Conley, 2010). What college knowledge do you think students need to successfully transition to college?
- 4. How and from where do students acquire college knowledge?
- 5. What programs are offered to students to aid in their transition to college?
- 6. Are there transition activities or programs that other schools are doing that you would like to be doing? If yes, please explain.
- 7. Do you collaborate with area high schools on preparing students for their transition to college? If so, how?

APPENDIX D STUDENT SURVEY

Survey on Students' Transition from High School to College

As a current first-year or second-year undergraduate student at George Mason University (Mason), your responses to this survey will enhance our understanding of students' transition to college. This study will identify the college knowledge that students acquire during their transition from high school to college. It will also look at how high schools and higher education institutions have helped students gain this knowledge. Participants will be program staff from Mason, guidance counselors and college transition counselors at high schools in Northern Virginia, and current first-year and second-year undergraduates from the Northern Virginia area attending George Mason University.

Your participation in this research is, of course, voluntary. Participants must be 18 years or older. You may exit this survey at any time with no penalty. Return of this survey to me is your consent for your responses to be compiled with others. Additionally, by completing this survey, you are giving consent to participate in this study.

All information obtained in this study is strictly confidential. Although the survey is coded to allow for follow-up with non-respondents, you will not be individually identified with your questionnaire or responses. The use of this data will be limited to this research, as authorized by George Mason University. The results of this study may be used in reports, presentations, and publications, but the researchers will not identify you. Only Kathryn Angeles will have access to individual data. All data will be encrypted and stored in a secure location and then destroyed three years after completion of the study.

You have the right to express concerns to me (908-884-7150; kangeles@masonlive.gmu.edu), to my thesis committee chair Dr. Jan Arminio, Director of the Higher Education Program at Mason (703-993-2064; jarminio@gmu.edu), or to George Mason University's Office of Research Integrity & Assurance (703-993-4121).

I greatly appreciate your participation in this research. The survey will take approximately 10-15 minutes to complete. Please complete the survey by Monday, February 3, 2014.

If you have any questions, please do not hesitate to contact me at the number or email below

Thank you for your interest and participation in this study. As mentioned, by completing this survey, you are giving consent to participate in this study.
Sincerely,
Kathryn Angeles Graduate Student, MAIS Higher Education Concentration, George Mason University 908-884-7150, <u>kangeles@masonlive.gmu.edu</u>
* Required Question
Demographics
Are you 18 years or older? * Only students aged 18 years or older will be asked to complete the remainder of the survey. Yes No
Are you from the northern Virginia area? * Includes counties of Arlington, Fairfax, Loudon, and Prince William; Includes independent cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park (http://www.vtrans.org/resources/VSMMFS-II_SR1_NOVA.pdf) Yes No
College Attendance
What year of college are you in? *

Did you enroll at Mason within one year of your high school graduation? * Only those students who immediately transitioned to college after high school will be asked to complete the remainder of the survey.

•	Yes
0	No

First year

Second year

College Knowledge

College knowledge is an understanding of the admissions, financial aid, and enrollment processes, the culture of college, and how colleges operate (Conley, 2010). Examples of college knowledge include knowing how to fill out the FAFSA, the differences between high school and college, the differences between the various types of colleges, how to interact with professors, how to interact with students with differing perspectives and cultures, etc.

What college knowledge did you acquire when you prepared for college? *
<u> </u>
What college knowledge did you find helpful during your transition from high school to college? *
<u> </u>
College Preparation and Transition Activities
What college preparation activities did you find most helpful? Please describe why. *
T
What college transition activities helped you adjust to the college environment? Please describe why. *

Support Systems

Do not list names of specific people. Please identify groups of people. For example, parents, siblings, guidance counselors, teachers, etc.	
	<u>^</u>
1	<u> </u>
Who aided in your transition and adjustme Do not list names of specific people. Pleas parents, siblings, guidance counselors, tea	e identify groups of people. For example,
1	F F
Additional Demographics	
Gender:	
[1]	<u> </u>
Ethnic Background:	
	<u> </u>
	<u></u>
What high school did you graduate from?	

Who was supportive of your college preparation activities? How were they supportive? *

Thank you for your interest and participation in this study! Please do not hesitate to contact me (908-884-7150; kangeles@masonlive.gmu.edu) with any questions you may have.

APPENDIX E EMAIL SENT TO STUDENTS WITH ONLINE SURVEY

Hello,

My name is Kathryn Angeles, and I am a graduate student in the Interdisciplinary Studies Program (MAIS) at George Mason University. I am currently working on my masters' thesis and I am writing to ask you to fill out an online survey for my research.

For my research, I am examining the college knowledge that students acquire during their transition from high school to college. I will also look at how high schools and higher education institutions have helped students gain this knowledge. The survey will take approximately 10-15 minutes to complete.

If you agree to participate, please fill out the online survey at https://docs.google.com/forms/d/1NZYUJIMSnvpIDKAEhlLgudbnzzt0RNCpGHoA76G Kc-o/viewform by Monday, February 3, 2014.

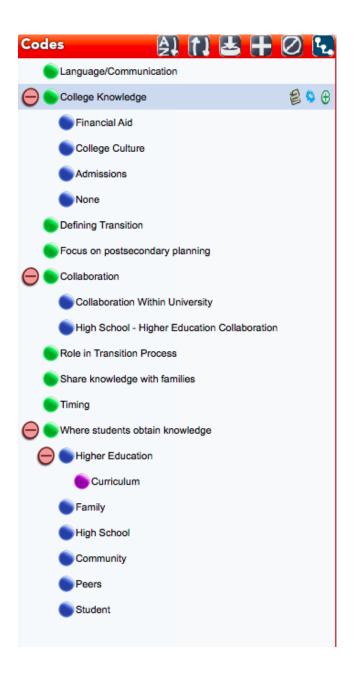
Return of the online survey is your consent for your responses to be compiled with others. All information obtained in this study is strictly confidential. Although the survey is coded to allow for follow-up with non-respondents, you will not be individually identified with your questionnaire or responses. The use of this data will be limited to this research, as authorized by George Mason University. The results of this study may be used in reports, presentations, and publications, but the researchers will not identify you.

For questions or to report a research-related problem, please do not hesitate to contact me at (908) 884-7150 or at kangeles@masonlive.gmu.edu. You can also contact my thesis committee chair Dr. Jan Arminio, Director of the Higher Education Program at GMU at (703) 993-2064 or at jarminio@gmu.edu or the George Mason University Office of Research Integrity & Assurance at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research.

Thank you for your time!

Kathryn

APPENDIX F CODING TREE



REFERENCES

- ACT. (2013). *National collegiate retention and persistence to degree rates*. Retrieved from: http://www.act.org/research/policymakers/pdf/retain 2013.pdf
- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion* from high school through college. Washington, DC: U.S Department of Education.
- Boswell, K. (2000). Building bridges or barriers? Public policies that facilitate or impede linkages between community colleges and local school districts. *New Directions for Community Colleges*, 2000, 3-15. doi: 10.1002/cc.11101
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education*. New York: Greenwood Press.
- Burleson, D.A., Hallett, R.E., & Park, D.K. (2008). College knowledge: An assessment of urban students' awareness of college processes. *College & University*, 84(2), 10-17.
- Carnevale, A.P., Smith, N., & Strohl, J. (2010, June). *Help wanted: Projections of jobs and education requirements through 2018 executive summary*. Retrieved from http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/HelpWanted.ExecutiveSummary.pdf
- Clark, M.R. (2005). Negotiating the freshman year: Challenges and strategies among first-year college students. *Journal of College Student Development*, 46(3), 296-316.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, S95-S120.
- College Board. (2014). *The 10th annual AP report to the nation*. Retrieved from: http://apreport.collegeboard.org/
- Conley, D.T. (2005). College knowledge: What it really takes for students to succeed and what we can do to get them ready. San Francisco, CA: Jossey-Bass.

- Conley, D.T. (2008). Rethinking college readiness. *New Directions for Higher Education*, 2008, 3-13. doi: 10.1002/he.321
- Conley, D. T. (2010). College and career ready: Helping all students succeed beyond high school. San Francisco, CA: Jossey-Bass.
- Davis, J. (2010) The first-generation student experience: Implications for campus practice, and strategies for improving persistence and success. Sterling, VA: Stylus Publishing, LLC.
- Domina, T., & Ruzek, E. (2012). Paving the way: K-16 partnerships for higher education diversity and high school reform. *Educational Policy*, 26, 243-267. doi: 10.1177/0895904810386586
- Engle, J., Bermeo, A., & O'Brien, C. (2006). Straight from the source: What works for first-generation college students. Washington, DC: The Pell Institute for the Study of Opportunity in Higher Education.
- Engle, J. & Tinto, V. (2008). *College success for low-income, first-generation students*. Washington, DC: The Pell Institute for the Study of Opportunity in Higher Education
- Evans, N.J., Forney, D.S., Guido, F.M., Patton, L.D., & Renn, K.R. (2010). *Student development in college: Theory, research, and practice*. San Francisco, CA: Jossey-Bass.
- Farmer-Hinton, R.L. (2008). Social capital and college planning: Students of color using school networks for support and guidance. *Education and Urban Society*, 41, 127-157. doi: 10.1177/0013124508321373
- George Mason University Factbook 2012-13. Retrieved from http://irr.gmu.edu/factbooks/1213/Factbook1213.pdf
- George Mason University (2014). *The Mason IDEA*. Retrieved from http://masonidea.gmu.edu/the-mason-idea-our-core-institutional-characteristics/
- Goldrick-Rab, S., Carter, D.F., & Wagner, R.W. (2007). What higher education has to say about the transition to college. *Teachers College Record*, 109(10), 2444-2481.
- Hooker, S., & Brand, B. (2010). College knowledge: A critical component of college and career readiness. *New Directions for Youth Development*, 2010, 75-85. doi: 10.1002/yd.364
- Kirst, M.W., & Venezia, A. (2004). From high school to college: Improving

- opportunities for success in postsecondary education. San Francisco, CA: Jossey-Bass.
- Kuh, G.D., Kinzie, J., Buckley, J.A., Bridges, B.K., & Hayek, J.C. (2006). What matters to student success: A review of the literature. Retrieved from: http://nces.ed.gov/npec/pdf/kuh_team_report.pdf
- Louie, V. (2007). Who makes the transition to college? Why we should care, what we know, and what we need to do. *Teachers College Record*, 109(10), 2222-2251.
- National Center for Education Statistics. (2013). *The condition of education 2013* (NCES 2013-037). Washington, DC: U.S. Government Printing Office.
- Porter, A. C., & Polikoff, M. S. (2012). Measuring academic readiness for college. *Educational Policy*, 26, 394-417. doi: 10.1177/0895904811400410
- Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: The challenge for urban high schools. *The Future of Children*, 19(1), 185-209.
- Schlossberg, N.K. (1989). Marginality and mattering: Key issues in building community. *New Directions for Student Services*, 1989, 5-15. doi: 10.1002/ss.37119894803
- Schlossberg, N. K. (2011). The challenge of change: The transition model and its applications. *Journal of Employment Counseling*, 48, 159-162. doi: 10.1002/j.2161-1920.2011.tb01102.x
- Sedlacek, W.E. (2011). Using noncognitive variables in assessing readiness for higher education. *Readings on Equal Education*, 25, 187-205.
- Smith, J.S., & Wertlieb, E.C. (2005). Do first-year college students' expectations align with their first-year experiences? *NASPA Journal*, 42(2), 153-174.
- Smith, W.L., & Zhang, P. (2009). Students' perceptions and experiences with key factors during the transition from high school to college. *College Student Journal*, 43(2), 643-657.
- Sommerfeld, A. (2011). Recasting non-cognitive factors in college readiness as what they truly are: Non-academic factors. *Journal of College Admission*, 213, 18-22.
- Vargas, J.H. (2004). *College knowledge: Addressing information barriers to college*. Boston, MA: The Education Resources Institute.
- Venezia, A., & Kirst, M.W. (2005). Inequitable opportunities: How current education systems and policies undermine the chances for student persistence and success in

- college. Educational policy, 19, 283-307. doi: 10.1177/0895904804274054
- Venezia, A., Kirst, M.W., & Antonio, A.L. (2003). Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations. Retrieved from http://www.stanford.edu/group/bridgeproject/betrayingthecollegedream.pdf
- Ward, L., Siegel, M.J., & Davenport, Z. (2012). First-generation college students: Understanding and improving the experience from recruitment to commencement. San Francisco, CA: Jossey-Bass.
- Wyatt, J.N., Wiley, A., Camara, W.J., & Proestler, N. (2012). *The development of an index of academic rigor for college readiness*. New York, NY: College Board.
- Yazedjian, A., Purswell, K.E., Sevin, T., & Toews, M.L. (2007). Adjusting to the first year of college: Students' perceptions of the importance of parental, peer, and institutional support. *Journal of the First-Year Experience & Students in Transition*. 19(2), 29-46.
- Yin, R.K. (2014). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications, Inc.

BIOGRAPHY

Kathryn Angeles graduated from Vassar College in 2007 with a Bachelor of Arts degree in Psychology. Her passion for college access and success for all students began when she become involved with Let's Get Ready, a college access organization, as the codirector for college choice for the Newark, New Jersey program in Summer 2006. During her senior year at Vassar College, she co-founded a Let's Get Ready program for Poughkeepsie High School students. After graduating from Vassar College, she was employed as a grants administrator and assistant to the president at the Charles H. Revson Foundation in New York City for two-and-a-half years. From 2009 to 2014, Kathryn was a program associate in the Office of Quality, Curriculum, and Assessment at the Association of American Colleges and Universities in Washington, DC.